MINIMUM CRITERIA DETERMINATION CHECKLIST

Bridge Program Project No.: B-5728

State Project No.: 45684.1.1

Project Location: Alamance County, North Carolina

Project Description: Bridge Program Project B-5728 includes replacing Bridge No. 112 on NC 87 over Reedy Fork Creek partially within the northeastern municipal boundary of the town of Ossipee.

Existing Conditions – The bridge was built in 1949, and it has six spans, each being 50' long, totaling 300 feet in length. The clear roadway width is 25.833 feet. The posted speed limit is 50 MPH. The bridge is also currently posted for weight restrictions of vehicles traveling over it – 31 Posted SV and 35 Posted TTST. Currently, the bridge is bordered by residential and wooded land to the west and farmland and wooded lands to the east.

Proposed Conditions – The preferred alternative is to replace Bridge No. 112 in place with an onsite detour via a temporary bridge west of its existing location. The bridge will include a two-lane roadway with twelve foot lanes and a minimum of six foot paved shoulders. The design speed limit is 55 MPH. The bridge will be replaced with a new bridge approximately 340 feet in length. See vicinity, project study area, and environmental features maps below for reference.

Anticipated Permit or Consultation Requirements: It is anticipated that this project will meet requirements for USACE 404 NWP 3 for the bridge replacement impacts and NWP 33 for temporary impacts due to temporary detour structure, DWR 401 Certification, and Jordan Lake Buffer Permitting.

Special Project Information

Purpose and Need: The purpose of the proposed project is to remove a structurally deficient bridge and replace in-place with a bridge that meets current design standards and can accommodate future projected traffic volumes as well as accommodating all legal loads. The bridge is considered structurally deficient due to a substructure condition appraisal of 4 out of 9, according to Federal Highway Administration standards. NCDOT Bridge Management Unit records indicate Bridge No. 112 currently has a sufficiency rating of 29.32 out of a possible 100.

Estimated Traffic:

Current Year (2023) 6,433 vpd Future Year (2043) 7,100 vpd

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TTST 3% Dual 7%

Truck Percentage 10%

Roadway Classification: Minor Arterial

Hazardous Materials:

Two (2) sites of concern were identified within the project study area as documented in the August 23, 2016 GeoEnvironmental Planning Report (refer to locations of these sites in Figure 3). NCDOT's GeoEnvironmental Unit will conduct a Phase II GeoEnvironmental investigation for the sites of concern anticipated to be impacted by the project. Following the completion of the Phase II investigations, NCDOT GeoEnvironmental will prepare a Right of Way Acquisition Recommendations summary prior to new right of way being acquired. Contaminated soil, underground fuel storage tanks, and ground water monitoring wells in conflict with the project will be removed prior to construction or addressed in a Project Special Provision.

Pedestrian and Bicycle Accommodations:

The Alamance County planner noted that this bridge provides access to two schools in the area and pedestrians from Young's Trailer Park use the bridge to cross Reedy Fork Creek. NC Bicycle Route 74 also passes along the Closest Available Detour Route on Old NC 87. Bridge construction could temporarily impact access to pedestrians, however, the NCDOT WZTC has new poilicies in place to handle pedestrian traffic during construction which can be evaluated during final design.

The Burlington-Graham Metropolitan Planning Organization (MPO) Comprehensive Transporation Plan (CTP) for bicycle paths recommends improvements to the NC 87 route in Ossipee. Although, no special bicycle or pedestrian accommodations (i.e., 8 foot wide path and/or sidewalks) have been requested on the bridge. The current design has shoulders on the bridge six feet in width, which a bicycle or pedestrian could use to cross the bridge.

Alternatives Evaluation:

No-Build – The no-build alternative would result in eventually closing the road, which is unacceptable given the volume of traffic served by NC 87.

Rehabilitation – The bridge was constructed in 1949 and is reaching the end of its useful life. Rehabilitation would only provide a temporary solution to the structural deficiency of the bridge.

Staged Construction – Staged construction was not considered because of the availability of an acceptable onsite detour.

Offsite Detour - An offsite detour was considered but ultimately not chosen because no NC routes were available to detour traffic, especially truck traffic onto.

Preferred Alternative: Onsite Detour - The preferred alternative is to replace Bridge No. 112 in place with an onsite detour via a temporary bridge west of its existing location. This alternative was chosen based on the cost and the availability of an acceptable onsite detour.

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Public Involvement:

Landowner notification letters were sent to property owners on February 16, 2016. No comments have been received to date.

| Alternate | Construction Cost | ROW Cost | Utility Cost | Total |
|-----------------------|--------------------------|--------------|---------------------|-----------------|
| Alt. 2 On-Site Detour | \$ 5,800,000.00 | \$ 83,500.00 | \$ 77,578.00 | \$ 5,961,078.00 |

Source for Cost: M&N Estimate Submittals and NCDOT STIP.

N.C. River Basin Buffer Rules:

NC River Basin Buffer Rules for the Jordan Lake Watershed apply to the portion of Reedy Fork Creek within the study area and include 50-foot wide riparian buffers on all mapped surface waters. Potential impacts to protected stream buffers will be determined once a final alignment and design have been determined.

Alamance County Trails Plan:

The Reedy Fork Greenway is proposed to follow Reedy Fork Creek and pass under this bridge. The Alamance County Trails Plan 2015 confirms this plan, and indicates that this planned shared use path connects several municipalities and cultural/historic destinations. The Plan calls for construction over the next 10-20 years, with the schedule being revaluated every two years. Construction of the trail may overlap with construction of the bridge. Working with the Piedmont Triad Regional Council (Senior Regional Planner Jesse Day) and Alamance County to ensure that this bridge replacement accommodates the planned Reedy Fork Greenway passing under this bridge is recommended.

NCDOT's current design has included lengthening the bridge which has generated additional space from the stream bank to the end bent and therefore, could accommodate a future greenway trail under the bridge on either side of the creek.

In coordination with Brian Baker, Director of Alamance County Recreation and Parks, on November 21, 2019, he mentioned that Alamance County is currently acquiring the two parcels, one on each side, adjacent to the bridge on the south end to provide for pedestrian access under the bridge. The proposed trail may also be constructed within the next five years. The purpose of this trail is to link to the Mountains-to-Sea Trail (MST) that is present at a nearby bridge replacement project over the Haw River.

NCDOT will continue to coordinate with Alamance County and the Town of Ossipee on the greenway trail and potential access needed by pedestrians. Depending on the number of pedestrians crossing the bridge daily, NCDOT will use the Work Zone Traffic Control's (WZTC's) new guidance to provide accommodations.

The Alamance County Planning Director, Libby Hodges, indicates a desire for a paddle trail under the bridge, and within the NCDOT right-of-way. There is an existing need for recreational boat users to be able to exit the creek at this point before getting to the nearby dam. Ongoing coordination with the county for the use of NCDOT right-of-way is recommended, and a boater safety plan should be coordinated on during the time of construction. The boater safety plan will be produced along with the Traffic Management Plans (TMPs).

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PART A: MINIMUM CRITERIA

| Item | 1 to be completed by the Engineer. | YES | NO |
|--------|---|-----|----|
| 1. | Is the proposed project listed as a type and class of activity allowed under the Minimum Criteria Rule in which environmental documentation is <u>not</u> required? | | |
| | e answer to number 1 is "no", then the project <u>does not</u> qualify as a mum criteria project. A state environmental assessment is required. | | |
| If ye | s, under which category? 9 | | |
| If eit | her category #8, #12(i) or #15 is used complete Part D of this checklist. | | |
| PAI | RT B: MINIMUM CRITERIA EXCEPTIONS | | |
| | | | |
| | s 2 – 4 to be completed by the Engineer. | YES | NO |
| 2. | Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts? | | |
| 3. | Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment? | | |
| 4. | Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the Department? | | |
| Iton | 5-8 to be completed by Division Environmental Officer. | | |
| 5. | Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value? | | |
| 6. | Will the proposed activity endanger the existence of a species on the Department of Interior's threatened and endangered species list? | | |
| 7. | Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or ground water impacts? | | |

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| 8. PAR | Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits or shellfish, finfish, wildlife, or their natural habitats RT C: COMPLIANCE WITH STATE AND FEDERAL REGULA | YES | NO 🖂 |
|-----------|--|------|-------------|
| IAN | T C. COMPEIANCE WITH STATE AND PEDERAL REGULA | HOND | |
| | | YES | NO |
| 9. | Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action? | | |
| 10. | Does the action require the placement of temporary or permanent fill in waters of the United States? | | |
| 11. | Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs? | | |
| 12. | Is the proposed action located in an Area of Environmental Concern, as defined in the coastal Area Management Act? | | |
| 12 | | | |
| 13. | Does the project require stream relocation or channel changes? | | |
| Cult | ural Resources | | |
| 14. | Will the project have an "effect" on a property or site listed on the National Register of Historic Places? | | \boxtimes |
| 15. | Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas? | | |
| | | | |

Response to Question 9:

Northern long-eared bat

The USFWS has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), USACE, and NCDOT for the northern long-eared bat (NLEB) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for NLEB for the NCDOT program is "May Affect, Likely to Adversely Affect". The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Alamance County, where TIP B-5728 is located.

Bald Eagle

A desktop-GIS assessment of the project study area, also extending 660 feet outside of the project limits, was performed on April 8, 2016 using 2014 color aerials. The Reedy Fork Creek may be large enough or sufficiently open to be considered a potential feeding source. A visual survey of the study area and the area within 660 feet of the project limits was conducted on April 11, 2016. No nests or individuals were observed at the time of

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the survey. Additionally, a review of the NCNHP database on April 8, 2016 revealed no known occurrences of this species within one mile of the project study area. Due to the lack of known occurrences, and minimal impact anticipated for this project, it has been determined that this project will not affect this species.

Response to Question 10:

Three (3) jurisdictional streams were identified in the study area. Final stream impacts will be determined during the final design phase of the project.

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PART D:(To be completed when either category #8, 12(i) or #15 of the rules are used.)

| 16. | Project le | ngth: | | | | |
|--------------|---|--|---------|------------|--|--|
| 17. | . Right of Way width: | | | | | |
| 18. | Project completion date: | | | | | |
| 19. | O. Total acres of newly disturbed ground surface: | | | | | |
| 20. | Total acre | es of wetland impacts: | | | | |
| 21. | 1. Total linear feet of stream impacts: | | | | | |
| 22. | Project pu | arpose: | | | | |
| Prep | ared by: | DocuSigned by: Rebecksh Sins 379BBE3DE56D404 | Date: _ | 11/13/2020 | | |
| Approved by: | | Rebeckah Sims Environmental Scientist Moffatt & Nichol EUWN FISHUR, P.E. | Date: | 11/23/2020 | | |
| 11 | j | Kevin Fischer, P.E. Structures Management Unit North Carolina Department of Transportation | | | | |

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Project Commitments

Alamance County
Replace Bridge No. 112 on NC 87
over Reedy Fork Creek near the Town of Ossipee
WBS No. 45684.1.1
Project No. B-5728

FEMA Floodplains and Floodways (NCDOT Division 7)

This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division will submit sealed as-built construction plans to the NCDOT Hydraulics Unit upon completion of project construction, certifying that the drainage structures and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

Floodplain Mapping Program Coordination (NCDOT Hydraulic Design Unit)

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program to determine the status of the project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

Phase II GeoEnvironmental Investigation (NCDOT GeoEnvironmental Unit)

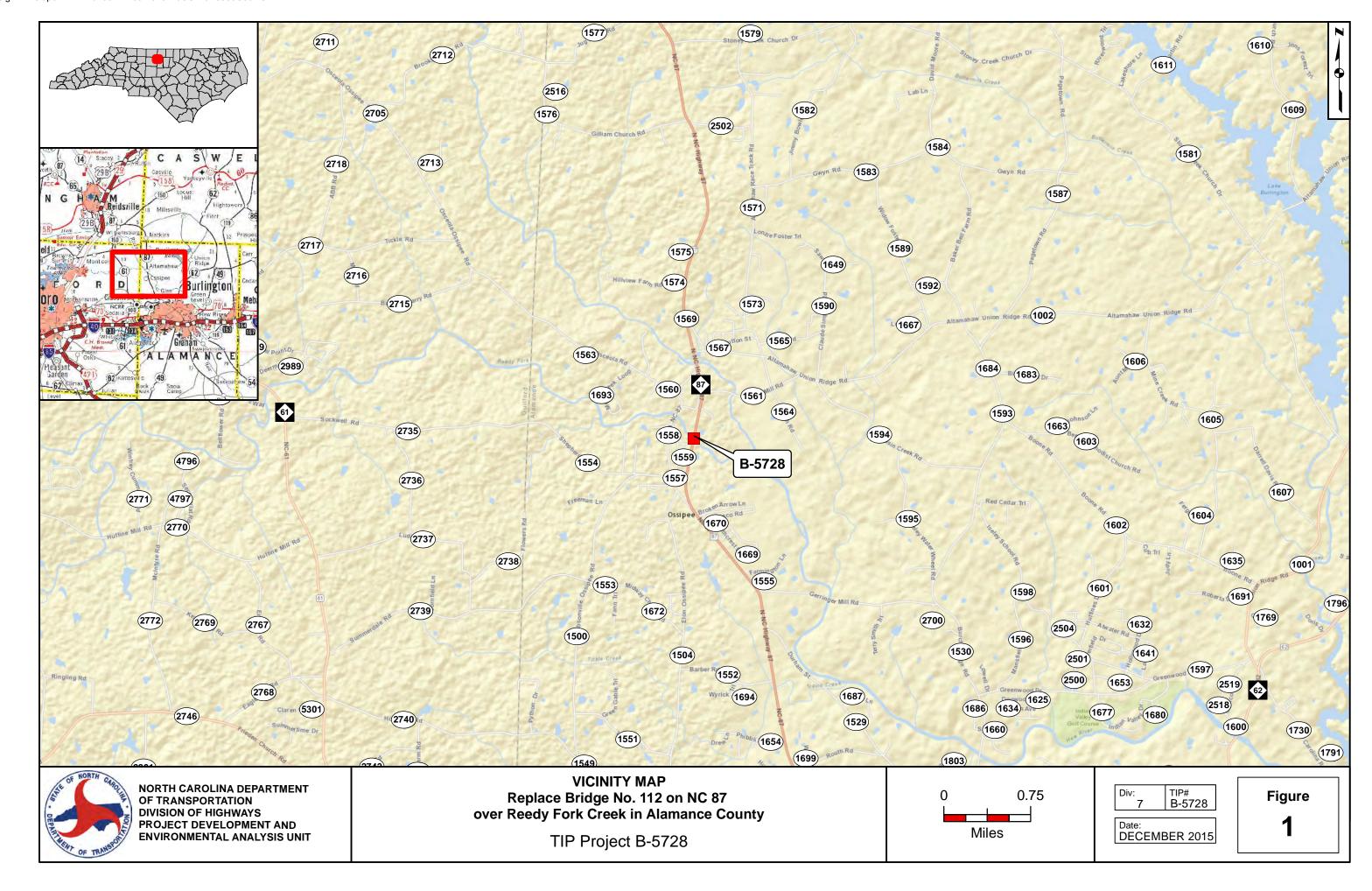
Two (2) sites of concern were identified within the project study area as documented in the June 22, 2018 GeoEnvironmental Planning Report (refer to locations of these sites in Figure 3). NCDOT's GeoEnvironmental Unit will conduct a Phase II GeoEnvironmental investigation for the sites of concern anticipated to be impacted by the project.

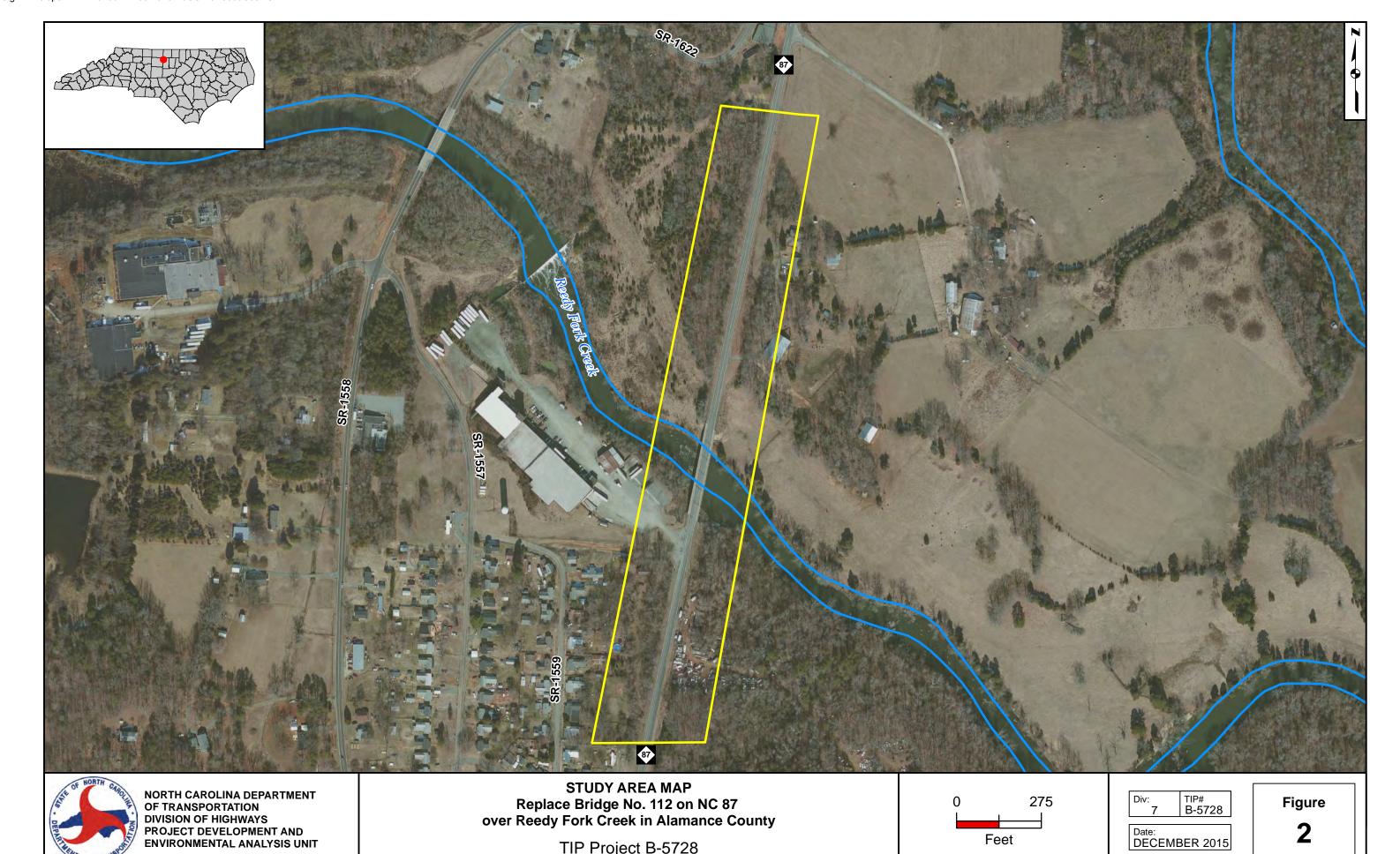
NC River Basin Buffer Rules (NCDOT Hydraulics Unit)

NC River Basin Buffer Rules for the Jordan Lake Watershed apply to the portion of Reedy Fork Creek within the study area and include 50-foot wide riparian buffers on all mapped surface waters.

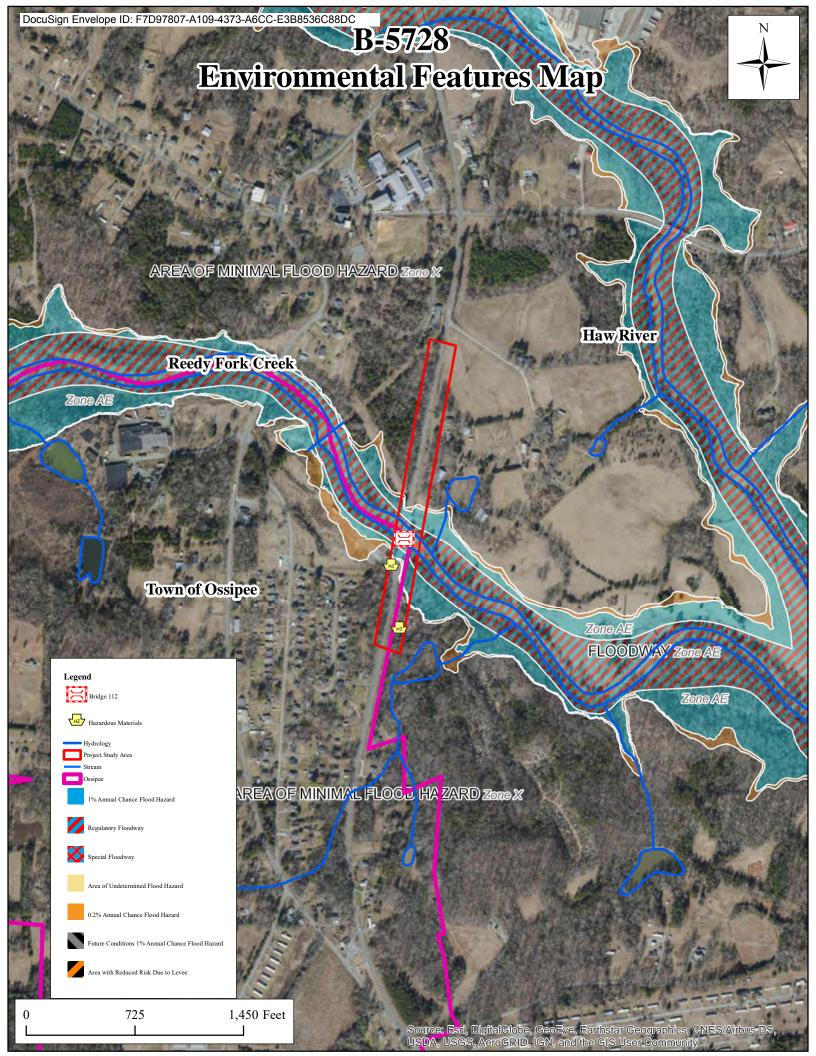
Alamance County Trails Plan (NCDOT Structures Management Unit)

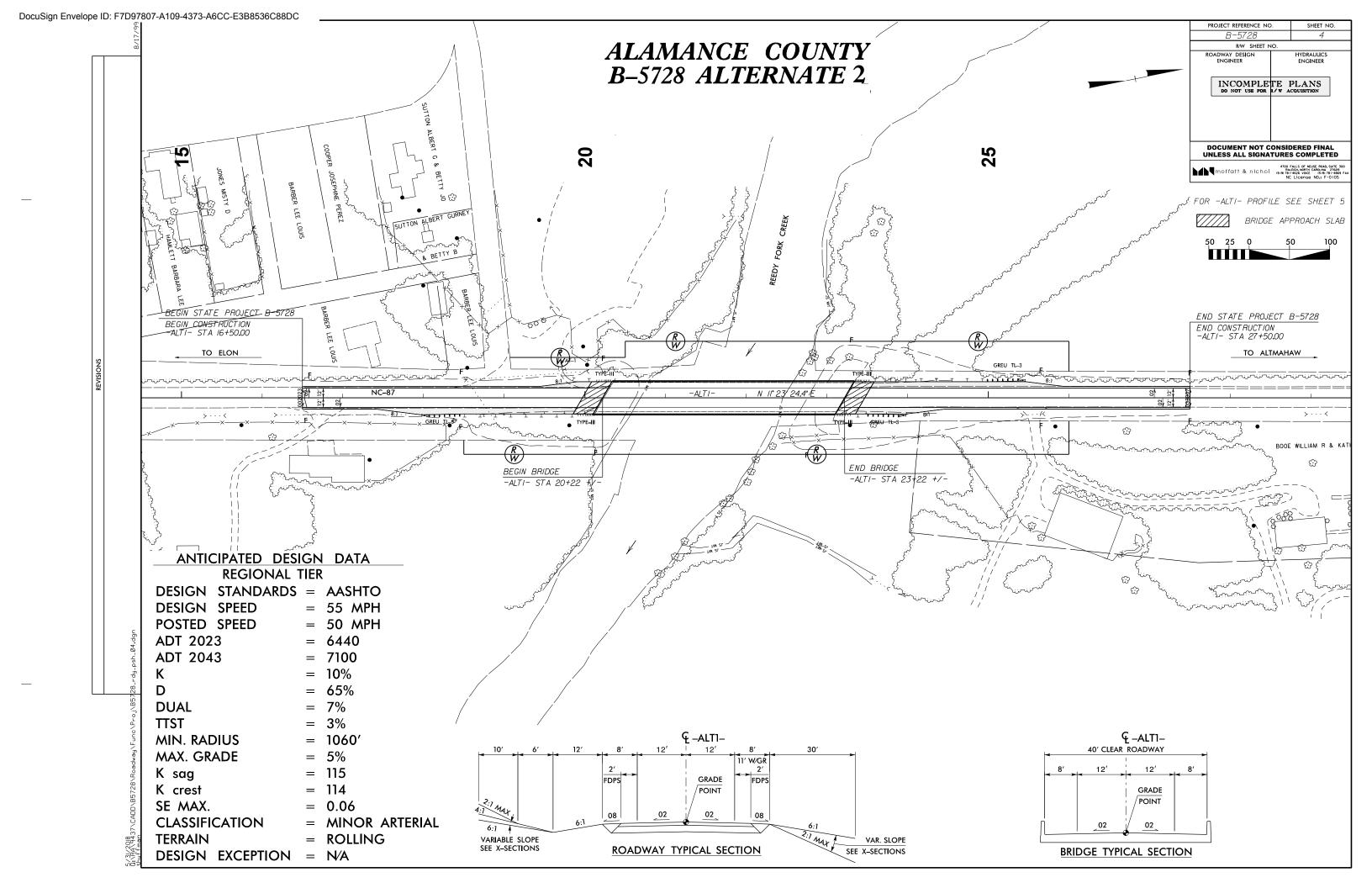
NCDOT will continue to coordinate with Alamance County and the Town of Ossipee to accommodate the proposed greenway trail to be constructed parallel to Reedy Fork Creek underneath Bridge No. 112.

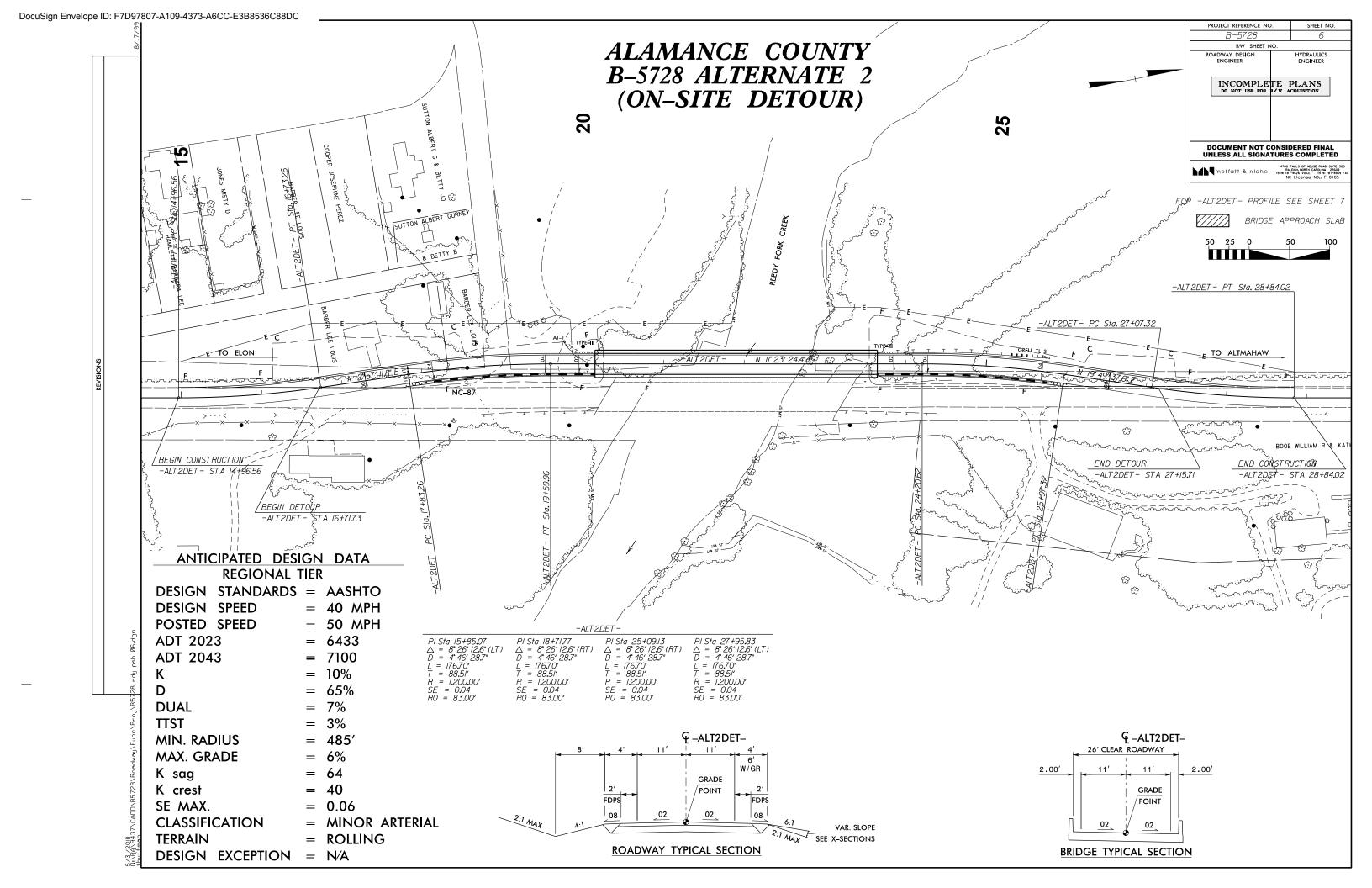




TIP Project B-5728







B-5728

16-01-0055



Project No:

HISTORIC ARCHICTECTURE AND LANDSCAPES NO HISTORIC PROPERTIES PRESENT OR AFFECTED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

Alamance

Date of field visit: n/a

PROJECT INFORMATION

County:

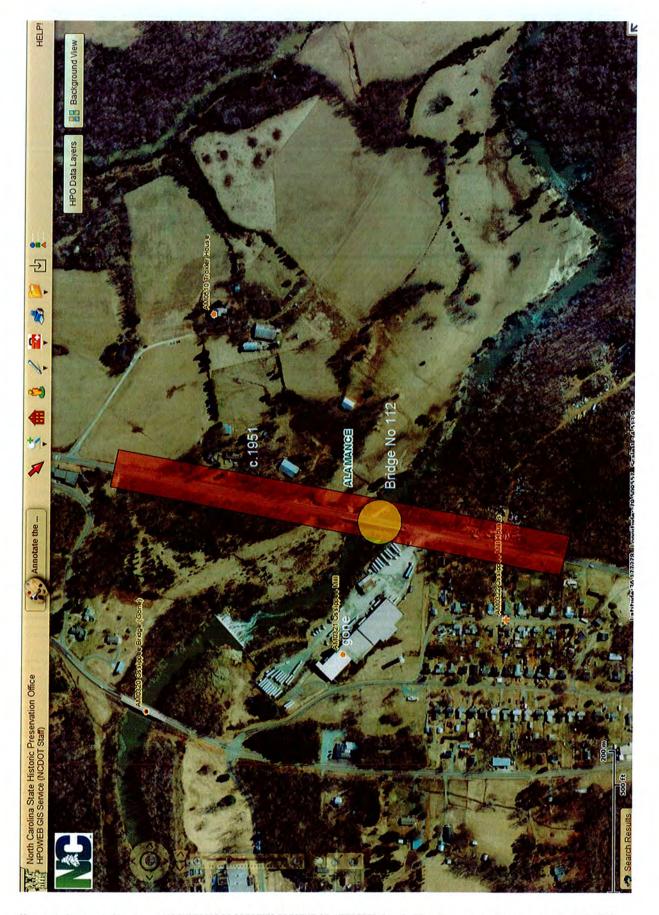
| WBS | o 1 vo. : | 45084.1.1 | Type: | CE | |
|--------------|------------------|---|--|---------------------------------------|--|
| Fed. | Aid No: | 112 | Funding: | State | |
| Fede Pern | eral nit(s): | Yes No | Permit Type(s): | unknown | |
| | | No. 112 on NC 87 over the | | ND LANDSCAPES REVIEW | |
| \boxtimes | There are | | ted or Study Listed pr | operties within the project's area of | |
| \boxtimes | There are | no properties less than f | | re considered to meet Criteria | |
| | There are | ation G within the project no properties within the properties over fifty year criteria for listing on the | e project's area of poters old within the area | | |
| \boxtimes | | | | | |

Description of review activities, results, and conclusions:

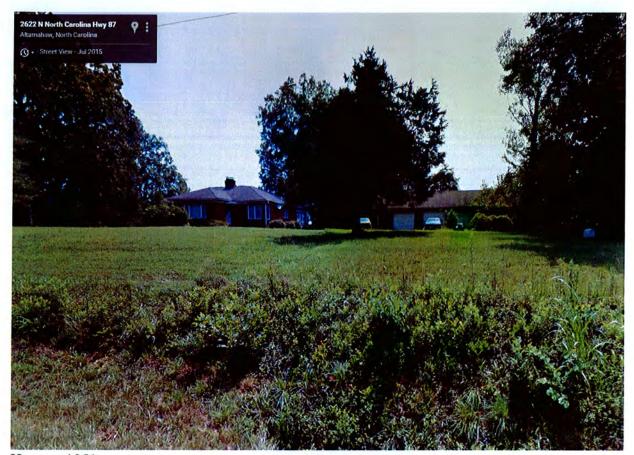
documents as needed.)

Review of HPOGIS web service was undertaken on January 26, 2016. Based on this review, there are no existing NR, DE, LL, SL, or SS properties in the project area. Ossipee Mill (AM0321) appears next to the bridge on the aerial photographs on HPOGIS web, but more recent aerial photographs and Google StreetView from July 2015 indicate that the mill has been destroyed. Ossipee Mill Houses (AM0322) are near the project area but none of the parcels for these houses intersect with the project area. One other house constructed in 1951 is indicated on Alamance County GIS Tax Data at the north end of the project area; however that house does not possess the architectural integrity or distinction to meet the criteria for National Register listing either individually or as a historic district. The bridge itself, Alamance County Bridge No. 112, was built in 1949. The structure does not exemplify any distinctive engineering or aesthetic type and is not eligible for the National Register of Historic Places. No historic properties will be affected by this project.

| | SUPPOR | CI DOCUMEN | NIATION | |
|--------------|-------------------------------|----------------|---------------------|--------------|
| Map(s) | Previous Survey Info. | ⊠Photos | Correspondence | Design Plans |
| | | | | |
| | | | | |
| | FINDING BY NCDO | T ARCHITEC | CTURAL HISTORIA | N |
| Historic Arc | hitecture and Landscapes – No | O HISTORIC PRO | OPERTIES PRESENT OF | AFFECTED |
| Shel | In Reap | | Jan | 26, 2016 |
| NCDOT Arc | chitectural Historian | | Date | |



Historic Architecture and Landscapes NO HISTORIC PROPERTIES PRESENT OR AFFECTED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.



House c.1951



Historic Architecture and Landscapes NO HISTORIC PROPERTIES PRESENT OR AFFECTED form for Minor Transportation Projects as Qualified in the 2007 Programmatic Agreement.

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16-01-0055



NO ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



| DDO | IFCT | INFORM | ATION |
|------------|------|--------|-------|
| PRU | | | A |

| Project No: | B-5728 | County: | Alamance |
|---------------------|-----------|---------------|------------------|
| WBS No: | 45684.1.1 | Document: | CE |
| F.A. No: | N/A | Funding: | State |
| Federal Permit Requ | ired? Xes | ☐ No Permit T | Type: NWP |

Project Description: The NCDOT proposes to replace Bridge No. 112 on NC 87 over Reedy Fork Creek in Alamance County. Bridge No. 112 was built in 1949, and is considered to be structurally deficient and functionally obsolete. The Proposed Study Area for the project will be centered on the bridge and measure about 300 feet wide by about 2,100 feet long. Overall, the Study Area will encompass about 605,920 square feet (13.9 acres), inclusive of the existing roadway and structure to be replaced.

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

A map review and site file search was conducted at the Office of State Archaeology (OSA) on Friday, January 15, 2016. An archaeological study has been conducted along this particular stretch of NC 87 (see Glover 1994 [TIP# R-2560]), and three (3) archaeological sites have been recorded within one-half (1/2) mile of the proposed project. Digital copies of HPO's maps (Ossipee Quadrangle) as well as the HPOWEB GIS Service (http://gis.ncdcr.gov/hpoweb/) were last reviewed on Monday, January 25, 2016. There are three (3) known historic architectural resources (Ossipee Mill [AM0321], Ossipee Mill Houses [AM0322], and Troxler House [AM0510]) within the vicinity of the Study Area; however, intact archaeological deposits associated with these resources would not be anticipated within the footprint of the proposed project. In addition, topographic maps, historic maps (NCMaps website), USDA soil survey maps, and aerial photographs were utilized and inspected to gauge environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, slope, agricultural, hydrological, and other erosive-type disturbances within and surrounding the archaeological APE.

Brief Explanation of why the available information provides a reliable basis for reasonably predicting that there are no unidentified historic properties in the APE:

This is a State-funded project for which a Federal permit will be required. The need for temporary and/or permanent easements has not been determined; however, the overall dimensions of the Study Area will capture any necessary easements. At this time, we are in compliance with NC GS 121-12a, since there are no eligible (i.e. National Register-listed) archaeological resources located within the project's Study Area that would require our attention. From an environmental perspective, Alamance County lies within the upland portion of the Piedmont Plateau region. The Study Area is characterized by gently rolling topography, which gives way to more rugged terrain near Reedy Fork Creek. The Study Area consists of six (6) soil types: Lloyd loam, 10-15% slopes, eroded (LbD2), Buncombe loamy fine sand, 0-2% slopes, occasionally flooded (Ba), Wilkes soils, 10-15% slopes (WbD), Helena coarse sandy loam, 2-6% slopes,

16-01-0055

eroded (HbB2), Enon fine sandy loam, 6-10% slopes, eroded (EdC2), and Wilkes soils, 6-10% slopes (WbC). The eroded, occasionally flooded, and moderately sloped soil conditions within the Study Area are not favorable for containing intact archaeological sites/resources. Preservation of archaeological materials within such soil types is likely to be poor. In addition, the Study Area falls within the project limits that were surveyed in 1994 as a result of the proposed NC 87 road widening project (TIP# R-2560). Based on the field methodology for that survey, the B-5728 Study Area was not deemed appropriate for formal archaeological investigations. In 1949, NC 87 was rerouted to bypass the towns of Ossipee and Altamahaw in northwestern Alamance County. As noted above, Bridge No. 112 was built in 1949, thus as part of the bypass project. Much of the corridor would have been greatly disturbed by the construction of the new alignment for NC 87 at that time. For comparative purposes, the Office of State Archaeology (OSA) has reviewed several projects within the vicinity of Bridge No. 112 for environmental compliance, including two (2) borrow pits (ER 86-7162 and ER 86-7504) and a stream restoration site (ER 06-1831). Stating a low probability and "NR eligible sites unlikely," OSA did not recommend archaeological surveys to be conducted. Although three (3) archaeological sites are located nearby, one at the confluence of Reedy Fork Creek and the Haw River and two further upstream along the Haw River, none of the sites were deemed eligible for the National Register. The contextual integrity of these sites has been greatly compromised by erosion and flooding episodes, limiting their archaeological interpretive significance. Based on the nature of the proposed project, current soil conditions, and previous review/survey work, it is believed that the current Study Area, as depicted, is unlikely to contain intact and significant archaeological resources. No archaeological survey is required for this project. If design plans change or are made available prior to construction, then additional consultation regarding archaeology will be required. At this time, no further archaeological work is recommended. If archaeological materials are uncovered during project activities, then such resources will be dealt with according to the procedures set forth for "unanticipated discoveries," to include notification of NCDOT's Archaeology Group.

| SUPPORT D | OCUMENTA | HON | | |
|---------------|--------------------|--|---------------|------------------|
| See attached: | | Previous Survey Info y of County Survey Notes | Photos Other: | Correspondence |
| FINDING BY | NCDOT AR | CHAEOLOGIST | | |
| NO ARCHAEC | OLOGY SURVI | EY REQUIRED | | |
| Ta | ul 1 | Mohler | | January 25, 2016 |
| NCDOT ARC | CHAEOLOGI | ST | | Date |

16-01-0055

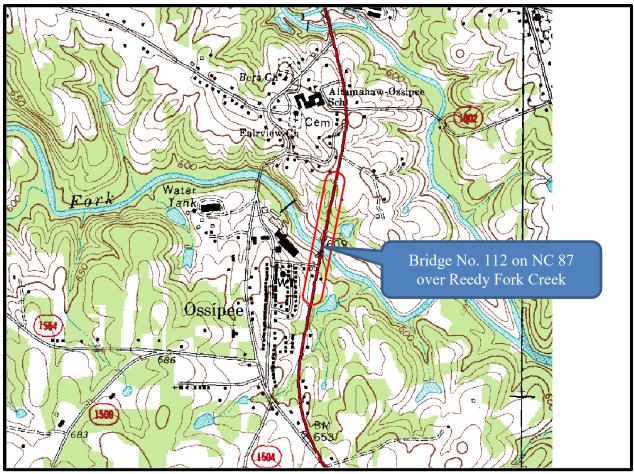
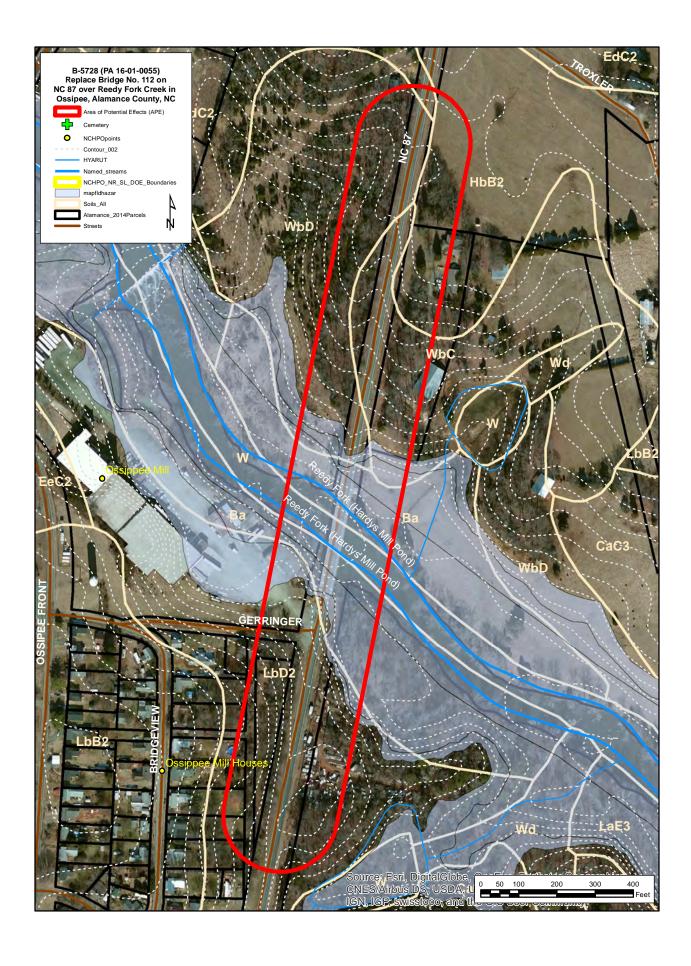


Figure 1: Ossipee, NC (USGS 1970).





1/24/2020

NCDOT Tierre Peterson 1000 Birch Ridge Drive Raleigh, NC 27610

RE: Replacement of Bridge No. 112; Alamance County, NC; Project B-5728

Dear Mr. Peterson,

Thank you for contacting us regarding the proposed bridge construction in Alamance County, NC. As this area is located within Monacan ancestral territory please allow us time to properly review and understand the project details. Even though we may not have any comments currently we do maintain the right to remain informed on the discovery of any Native American artifacts or human remains uncovered during the construction process. Should any findings appear, please contact the Monacan Indian Nation immediately.

Respectfully,

Chief Kenneth Branham Monacan Indian Nation DocuSign Envelope ID: F7D97807-A109-4373-A6CC-E3B8536C88DC

Tribal Historic Preservation Office 1536 Tom Steven Road Rock Hill, South Carolina 29730

Office 803-328-2427 Fax 803-328-5791



January 24, 2020

Attention: David Stutts NC Department of Transportation 1581 Mail Service Center Raleigh, NC 27699

Re. THPO#

Project #

Project Description

2020-193-98 B-5728

Replacement of Bridge No. 112 on NC 87 over Reedy Fork Creek in Alamance County

Dear Mr. Stutts,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail caitlinh@ccppcrafts.com.

Sincerely,

Wenonah G. Haire

Tribal Historic Preservation Officer

Cattle Roger for